

U.S. Appln. No. 09/844,421  
Response and Amendment dated June 14, 2004  
Reply to Office action of January 12, 2004  
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### AMENDMENT TO THE SPECIFICATION

Please replace paragraph [0023] with the following amended paragraph:

**[0023]** One or more supports containing the array of solids or mixtures of solids are placed in a chamber. The chamber may be sealed to prevent leaks and the chamber is equipped with conduits to flow at least one stream through the chamber to contact the plurality of solids. It is preferred that the conduits be equipped with a flow meter or other such device to regulate or measure the amount of fluid passing through the conduit. In a typical embodiment, the stream would be comprised of a carrier fluid and one or more adsorbate. Valving would allow different streams to be introduced to the chamber. For example, an inert fluid may be flowed through the chamber during a pretreatment portion of the process, and then the carrier fluid and adsorbate may be flowed during another portion of the process. While it is preferred that the invention be operated on a flowing basis with adsorbate compound(s) flowing by or through the solids under adsorption conditions, batch evaluations such as in a stirred autoclave or agitated container can be employed particularly in biological situations. It is understood that, because of the investigative nature of the method and the variety of solids that may be under investigation, the general term "adsorbate" refers to a fluid that may be adsorbed by one or more of the solids. In fact, however, one or more of the solids in a plurality may not interact with the "adsorbate" at all, and so the term "adsorbate" as used periodically herein is meant to include fluid with the potential or possibility of being adsorbed by the solids. It is not required that all of the solids actually adsorb the adsorbate, although only those having adsorbed adsorbate will result in a measurement of radiation emitted, absorbed, or altered by the respective solids during desorption of the adsorbate and a determination of at least one surface property. Temperature ranges or ramp rates, pressure ranges or ramp rates, space velocities, and other conditions will be dependent on the solids being evaluated and the adsorbate(s) used.